

# Hopi Indians Original Corn Growers of Southwest

PLANT IN HILLS EIGHT FEET APART AND SINK KERNELS FOOT DEEP

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**T**HE Hopi Indians, living where the rainfall is very limited in the best of years, using the most primitive of tools for working the ground—nothing more than a sharpened stick for planting—farming where the soil is extremely sandy in texture, and subject to the action of the winds that prevail in all dry countries and still maintaining their civilization for hundreds of years without the help from the white man—in fact, preferring to be left alone—make a very interesting study.

These Indians, after warring with the Navajos for many years, were finally driven as a last resort onto some high mesa with a precipitous wall. Here, during the past 500 years, they have built their houses and maintained their existence. They farm the more favored localities along the washes where there is a chance for flood water, and the sandy slopes. They plant the corn in hills eight feet

apart, dropping the fifteen or twenty grains in the hill. The only tools used are a sharp flattened stick to gouge out a cone-shaped hole in which the corn is planted eight to twelve inches deep, and a large hoe for cultivation. The large number of plants in a hill enable them to force their way to the sunlight. Frequently when the corn, melons or beans are planted on sandy soil, it is necessary to place brush wind-breaks every thirty feet to prevent the crop from being ruined.

The Indian lets his crop mature thoroughly in the field before harvesting for feed, food, or seed purposes. Much green corn is preserved as roasting ears for winter use. These are cooked in pits in the ground which have been well heated with fire, the fire removed and the ears, with husks on them are then covered completely with leaves and

mud, making a very efficient fireless cooker. After a time the corn is taken out and the husks removed, save a few which are braided with those on other ears, and all thus hung up to dry. The dried product is afterwards stored in neat piles, or left hanging from the ceiling until wanted for food.

When the mature corn is harvested, the stalk is bent to the ground, the ears snapped and thrown in piles. These are then carried to the house where they become the property of the women and are husked by them, some of the inner leaves being kept for household use. After the ears are removed the stalks are cut with a large hoe, tied in bundles and piled for feed.

The ear corn is stored in the house in neat, corn-like piles, the blue, white or yellow corn being piled separately. A two-year supply is kept on hand to

provide against crop failure.

The Hopi considers the blue corn superior to any other for the making of bread. This is ground very fine by the native method, the metate and mano or two stones rubbed together by hand. It is mixed with water that has been poured through ashes of a certain weed. The batter is made very thin and is poured on a flat baking stone and spread with the hand. The baking stone has a fairly smooth surface and is approximately 18 inches by 2 feet in size. This stone is kept hot by being placed over the fire. When the first cake is cooked it is removed and another portion poured on. Before this is quite finished, the first is laid on top and steamed and then rolled up as we would roll a piece of paper. The bread is thin in color, thin as paper and brittle in texture. During years of plenty, they quantities of corn to the Navajos, it is sold in the general market.

Going into the homes I found in 1800 every case two years supply of corn and beans. This I understand is a custom of the Hopis. Last year 500,000 pounds of corn was sold on the reservation. Lots can be learned from the Indian in regard to dry farming. He has been farming the same ground for hundreds of years, and has managed to keep up the fertility and they are bothered by insects and weeds and have been fighting their own way, but are learning new and better methods white man.

Practically every family has its own farm and orchard. Peaches, apricots and apples are the main fruit crops, together with grapes, and a few berries. Some of the peach trees are over 50 years old and still bearing. I saw one orchard that had been planted in 1800. The different varieties are kept separate, and good methods of seed selection are used. Hills are allowed to mature, with two ears on each stalk. The large hills are about ten feet apart. The hills of about 15 stalks and the hills more acres. The corn is planted in and are able to take care of many Indians have plows and cultivators. On several of the larger farms the every bit can be utilized. fields by means of small dikes, so that from the slopes is conducted onto the During the rainy season all the water ground continually hoed until harvest by hand about a foot deep, and the used, the corn and beans are planted in many instances no plows are long.

Through the courtesy of Mr. A. E. Marks, at Oraibi, I was able to visit a large number of the Indian farms, and study their system of planting and cultivation. The main farming districts lie along the deep washes, and have a sandy warm soil. The soil around so much that a white man would be discouraged the first two weeks of spring, but the Hopi patiently works and by various means manages to keep the soil where it belongs. In many instances no plows are used, the corn and beans are planted by hand about a foot deep, and the ground continually hoed until harvest. During the rainy season all the water from the slopes is conducted onto the fields by means of small dikes, so that every bit can be utilized.

REPORT OF TRIP TO HOPILAND  
 During my recent trip to the Hopi Indian reservation I received a new insight to the art of dry farming. Undoubtedly the Hopis are the original dry farmers. They have practiced farming in arid lands for hundreds of years, and judging from this year's crops grown under exceptionally dry conditions they should never fear a complete failure.  
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